

FIG.4

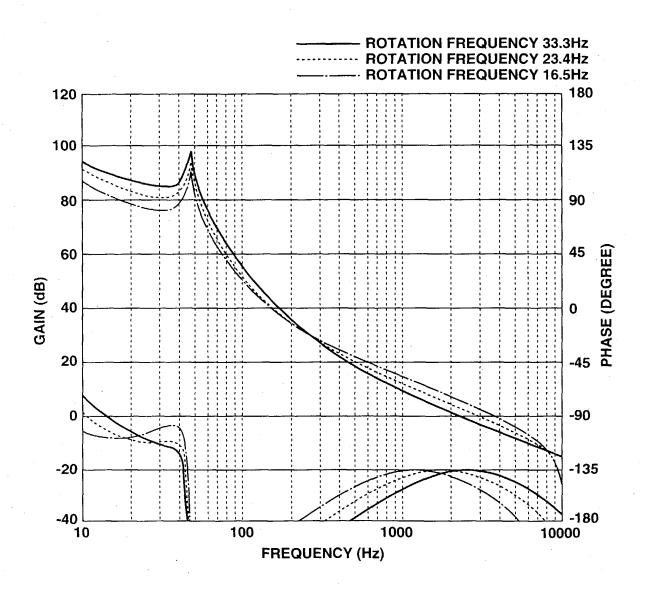
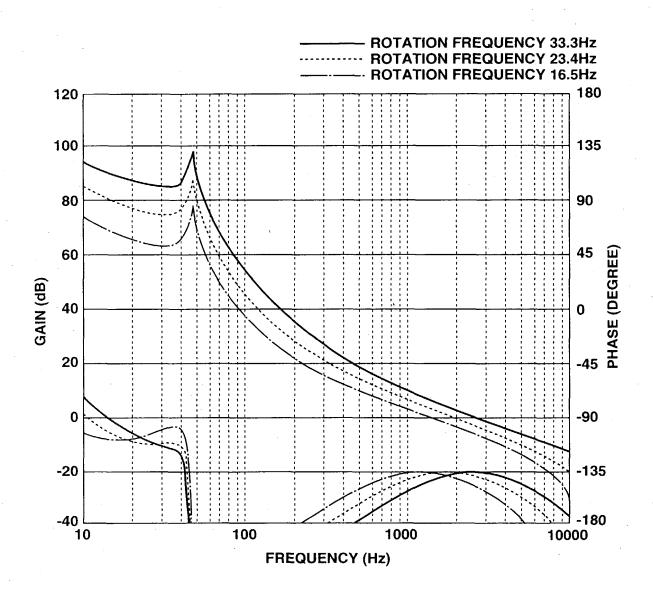


FIG.5



TRACKING GAIN CIRCUIT FOCUS GAIN CIRCUIT TRACKING-PHASE COMPENSATION CIRCUIT FOCUS-PHASE COMPENSATION CIRCUIT 13 TRACKING-ACTUATOR DRIVER FOCUS-ACTUATOR DRIVER  $\phi$ FIG.6 PRIOR ART TRACKING-ERROR GENERATION CIRCUIT FOCUS-ERROR GENERATION CIRCUIT DETECTION CIRCUIT 15 SPINDLE 18 16 CONTROLLER SPINDLE CONTROL CIRCUIT SPINDLE DRIVER

FIG.7
PRIOR ART

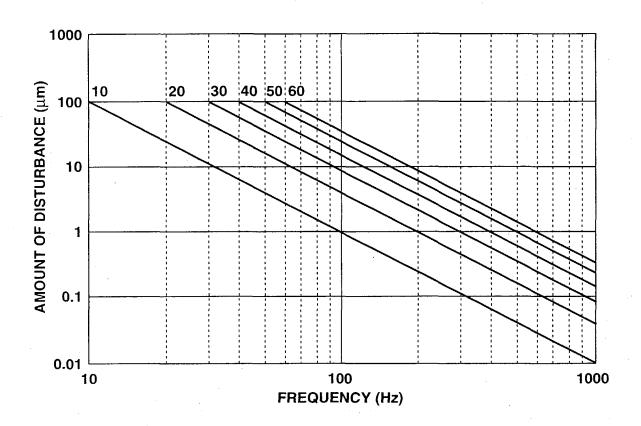


FIG.8 PRIOR ART

